



ISA Action 1.17: A Reusable INSPIRE Reference Platform (ARE₃NA)

Authentication, Authorization and Accounting for Data and Services in EU Public Administrations

D3.1 – Testbed Software

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1 Introduction

This document provides an overview of the software used in the project “*Authentication, Authorization and Accounting for Data and Services in EU Public Administrations*” launched by the Joint Research Centre of the European Commission (Contract n°389834). The project is part of ARE3NA, one of the actions of the ISA Programme (Action 1.17), aiming to create A re-usable INSPIRE reference platform. The general objective of the project is to assist the Joint Research Centre (JRC) of the European Commission in preparing a study, workshop and testbed on standards, technologies and best practices for the Authentication, Authorization and Accounting (AAA) of data and services to support secure data exchange by public administrations in Europe, including INSPIRE data and services.

The particular objectives for the project can be summarized as follows:

1. To identify and assess the current standards and technologies that would help to guarantee secure data exchange between public administrations, with particular focus on INSPIRE data and services, as well as those relevant in the context of the ISA programme and the Digital Agenda for Europe.
2. To identify and assess best practices in Europe with regard to the application of those standards and technologies for data and service sharing in order to better understand what works well, what not and what elements are missing or could be improved.
3. To design, develop and deploy an AAA-testbed using open source technology, based on existing INSPIRE and SDI components in three Member States taking into account the organisational, legal and technical settings.
4. To involve actively Member State representatives on the proposed AAA-architecture and testbed and to collect feedback from them.

As a key part of the project (Task 3), this document provides an overview of the software developed for the testbed and links to publicly available content through the JoinUp platform of the ISA Programme. The software was developed not only for the local servers of the consortium implementing the testbed (the first

phase of testing) but also the necessary extensions to include the supporting organizations in the federation, including the JRC's experiments in the Access Management Federation (AMF) approach as a machine-to-machine harvesting use case, where the data held in national and sub-national repositories was accessed using the INSPIRE geoportal.

2 Software package resources

Along with the other outputs of the study and testbed, the open source software packages used in the testbed and the developments to the software have been made available for reuse via the ISA Programme's JoinUp platform:

<https://joinup.ec.europa.eu/asset/are3na-aaa/description>.

Open source software used in the testbed included:

- Geomajas
- OpenLayers
- QGIS 1.7.0

The software stack involves these and other Open Source software products. Not all are included in the file but can be downloaded separately.

- Shibboleth IdP & SP: <https://shibboleth.net>
- Switch Discovery Service: <https://www.switch.ch/aai/support/tools/wayf.html>

The software package also contains the configurations using GeoXACML for the cross-border test cases, where data from different countries was made accessible to authenticated users in the testbed.